Heinke

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REMARKS

Claims 1-9 have been examined and are pending in the application. Claims 1, 6, and 8 are amended herein. Paragraphs [1], [28]-[29], and [35] to [44] of the specification are amended. Reexamination and reconsideration of all outstanding rejections and objections are requested.

The drawings are objected to because the circle ROM has been misnumbered as 44 instead of 95a in the specification. The numeral in the drawing is correct so the specification has been amended to change --44-- to "95a". Additional corrections to grammar and incorrect reference numerals have been made in the specification

Claims 1, 3, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Suzuki.

Claim 1, as amended, recites a system for indicating the location of an energy zone on an object surface. The energy zone is the part of the object surface that is imaged onto an IR detector by the IR optical system. Claim 1 further recites a video sub-system for displaying a displayed image of at least a part of the object surface not included in the energy zone and of at least a part of the object surface included in the energy zone; a range-finding sub-system that outputs a distance signal; and, an optical overlay sub-system.

The optical overlay subsystem overlays a shape outline over the displayed image that indicates the extent of a displayed image included in the energy zone.

The reference Nakamura discloses an infrared monitoring system that includes an infrared camera and a visible light camera both viewing the same scene to be monitored. As depicted in Fig. 4, the zoom lens 23 adjusts the frame size of the visible light image precisely to confirm to that of the infrared image. (3:47-50) The visible light incident on the visible light camera is attenuated so that only light energy above a threshold is imaged. The image from both the infrared camera and the visible camera are displayed on a TV monitor. (4:29-30). The images are also sent to a binarization circuit that performs a masking operation so that the reflecting region from the visible light camera is a not-to-be-processed region when calculating the temperature. (5:1-26).

The Office Action states that Nakamura shows a system for indicating the location of an energy zone on an object surface with a video subsystem, and an optical overlay system, but does not show a range finder sub-system.

This rejection is respectfully traversed for the following reasons. As described above, in Nakamura the visible light camera and the IR camera view the <u>same</u> scene and the energy zone, as

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defined in the claims, is exactly imaged by the visible light camera. Thus, the visible light image is confirmed to that of the infrared image and there is no teaching or reason to overlay a shape to outline the energy zone.

In the claimed system, and as depicted in Fig. 4 at elements 20 and 40, the display and object surface respectively, and described at paragraph 30, the video sub-system image includes part of the object surface that is not included in the energy zone, i.e., not imaged by the IR camera. The claimed range-finding system and overlay sub-system cooperate to overlay a shape indicating the extent of the energy zone over the displayed image.

The range finding sub-system of Suzuki provides no teaching to modify Nakamura to meet the claimed limitations. The basic principle of operation of Nakamura teaches away from outlining the energy zone in the displayed image since the energy zone is coincident with the displayed image.

Accordingly, pending claim 1 is deemed patentable over the cited references. Pending claims 6 and 8 recite similar limitations and are allowable for the same reasons and other reasons. The remaining claims are dependent claims and are allowable for the same reasons as the independent claims and also recite additional limitations and are thus additionally allowable.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (925) 944-3320.

Respectfully submitted,

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